

ODFW AQUATIC INVENTORY PROJECT
OREGON PLAN FOR SALMON & WATERSHEDS
STREAM RESTORATION HABITAT REPORT

STREAM: Elliott Creek (N-337)
BASIN: Wilson River
SURVEY TYPE: Post-Tx
DATE: March 28, 2006
SURVEY CREW: Ryan Jacobsen, Jason Hatfield
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 8.8 km²
USGS MAPS: Woods Point
ECOREGION: Coast Range Volcanic

GENERAL DESCRIPTION:

The Elliott Creek habitat survey extended 1,273 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 4.4 (range: 3.0-5.0). Land use for the reach was second growth (15-30 cm dbh) and large (50-90 cm dbh) trees. The average unit gradient was 3.1 percent. Riffles (53%), rapids (24%) and scour pools (21%) dominated stream habitat. Cobble (37%) and gravel (33%) dominated stream substrate. Wood volume was high at 46.9 m³/100m.

COMMENTS:

There were no potential barriers to upstream fish migration in the surveyed length.

The crew noted several habitat structures during the survey.

REACH 1

T02N-R06W-S35NE

REACH 1

Valley and Channel Summary

Valley Characteristics (Percent Reach Length)

<u>Narrow Valley Floor</u>		<u>Broad Valley Floor</u>	
Steep V-shape	0%	Constraining Terraces	100%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	4.4	VWI Range:	3 - 5

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	100%	Braided Channel	0%
Alt. Terrace/Hill	0%		
Landuse	0%		

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary Channel	1,273	7,944	1
Secondary Channel	332	829	1
Off-Channel Units	73	76	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 6	<u>First Terrace</u> n = 2
Width: 4.3	Width: 9.2	18.8 (12.7 - 23.4)	19.0 (15 - 23)
Depth: 0.39	Height: 0.8	1.5 (1.4 - 1.7)	0.9 (1.7 - 20)

W:D ratio: 12.3
 Stream Flow Type: MF
 Average Unit Gradient: 3.1%
 Water temperature (°C): 6.0 - 6.0

Entrenchment (ACW:FPW ratio): 2.2
 Habitat Units/100m (total channel length): 6.5
 Habitat Units/100m (primary channel length): 8.9

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	LT
Riparian Vegetation:	D30	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:		Reach avg:
Undercut Banks:		Range: -

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	363	28.5
Volume (m ³):	597	46.9
Key pieces (>=12m x 0.60m):	48	3.8

OREGON DEPT OF FISH AND WILDLIFE

ELLIOTT CREEK POST-TX (1-NC, 337)

HABITAT INVENTORY

Report Date: 5/3/2007

Survey Date:

3/28/2007

REACH 1		T02N-R06W-S35NE					REACH 1					
HABITAT DETAIL												
Habitat Type	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BOULDERS	6	33	0.8	0.06	29	0	10	28	28	23	10	0
DRY UNIT	2	13	1.1	0.02	13	0	0	20	45	35	0	0
POOL-BACKWATER	1	10	4.0	0.65	39	0	10	60	15	15	0	0
POOL-DAMMED	1	5	2.0	0.40	10	0	0	30	35	35	0	0
POOL-LATERAL SCOUR	36	345	4.9	0.75	1,856	0	7	24	32	34	3	1
POOL-PLUNGE	2	7	6.5	0.65	43	0	3	38	25	35	0	0
RAPID/BOULDERS	19	463	3.4	0.20	2,120	0	1	19	28	45	7	0
RIFFLE	29	697	4.6	0.25	3,789	0	5	17	37	38	2	0
RIFFLE W/ POCKETS	4	127	7.6	0.41	919	0	0	10	33	51	6	0
STEP/COBBLE	4	15	5.6	0.23	82	0	0	10	34	55	1	0
STEP/LOG	9	16	3.1	0.09	59	0	6	26	36	31	2	0
Total:	113	1,731	4.3	0.39	8,960	0	Avg: 5	21	33	37	4	0

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		
					(m ²)	Percent	Number	(# / 100m ²)	
Dammed & BW Pools	2	15	3.0	0.53	49	0.55%	0	0.0	
Scour Pools	38	352	5.0	0.74	1,899	21.19%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	33	824	5.0	0.27	4,709	52.55%	0	0.0	
Rapids	19	463	3.4	0.20	2,120	23.66%	0	0.0	
Cascades	6	33	0.8	0.06	29	0.32%	0	0.0	
Step/Falls	13	31	3.9	0.13	141	1.58%	0	0.0	
Dry	2	13	1.1	0.02	13	0.15%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths	
		<u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	40	23.1	31.4
Pools >=1m deep:	5	2.9	3.9
Complex pools (LWD pieces>=3):	16	9.2	12.6
Pool frequency (channel widths/pool):	4.7		
Residual pool depth (avg):	0.50		

Comment Summary

Restoration Monitoring Sites 2007

MONITORING AREA: 1-NC SITE ID: 337 ELLIOTT CREEK POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
1	RB	01	27.8	HS, DJ	PLACED LOGS
4	SL	00	28.3		FLOW GOES SUB SURFACE
5	DU	02	28.3		NO CHANNEL VISABLE BUT THERE
7	LP	00	46.9	HS	
8	RI	00	81.3	HS	LOGS
10	RI	01	142.6	HS	
11	BW	10	142.6		CUT AND CABLED LOGS
12	RI	00	158.8	HS	LOGS
13	LP	00	165.7	HS	CABLED LOGS/ 60-70MM SALMONIDS
14	RI	00	194	HS	LOGS
15	LP	00	208.2	HS	LOGS CABLED LOGS
17	LP	01	226.7	TJ/ BV	
18	SL	11	226.7		ACW=1.3 TEMP=6.0
21	SL	00	244.7	HS	
23	RI	11	258.3		ACW=2.3 TEMP=7.0
24	RP	00	287.1	HS	
25	LP	00	298.5	HS	LOGS
26	RP	00	315.2	HS	
27	RI	01	353	SS/ TJ/	
30	RI	00	413.2	HS	
31	RI	00	442.5	HS	

Comment Summary

Restoration Monitoring Sites 2007

MONITORING AREA: 1-NC SITE ID: 337 ELLIOTT CREEK POST-TX

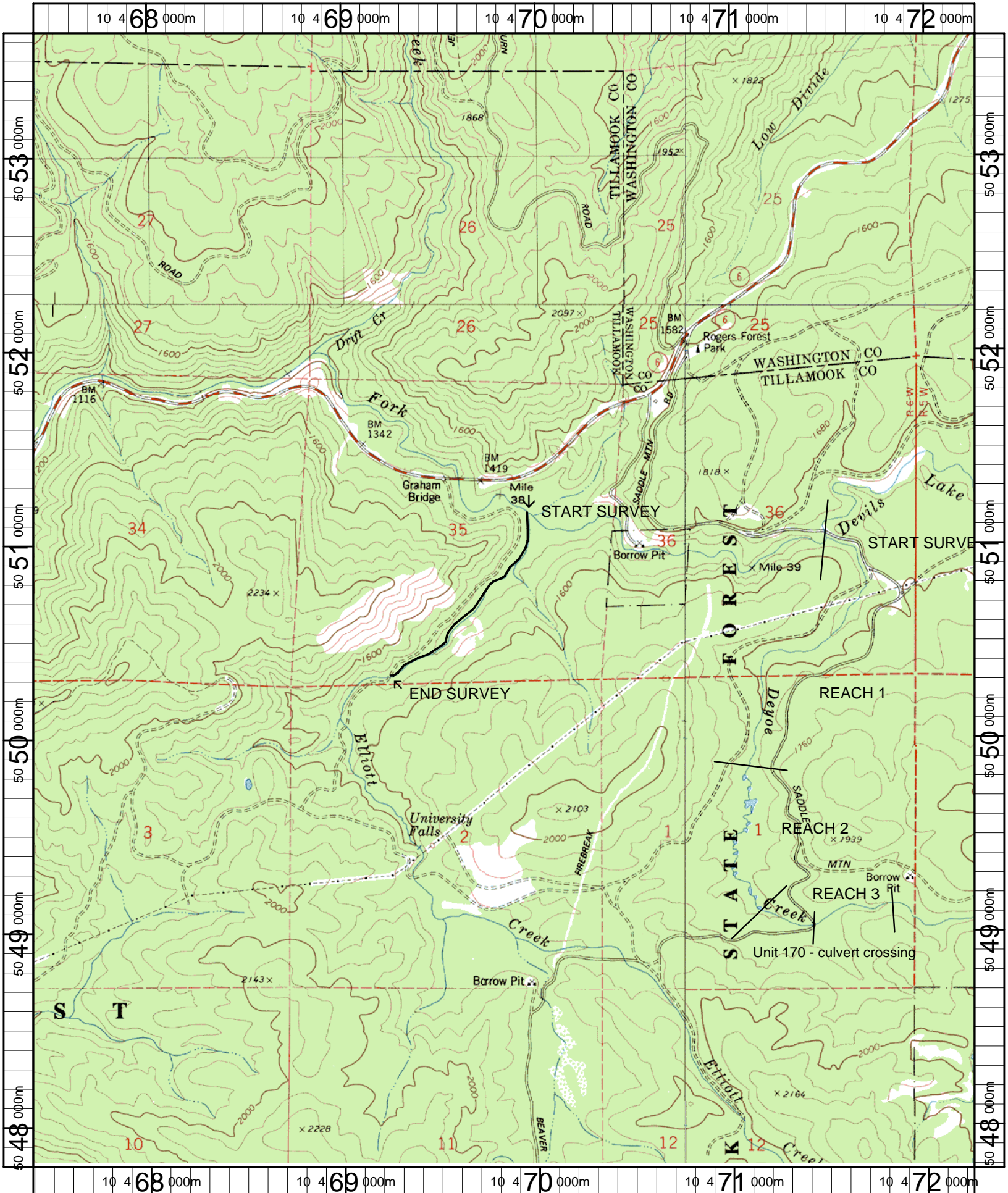
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
33	RP	00	486.4	HS	
34	LP	00	500.7	HS	
35	RI	00	514.5	HS	
36	LP	00	521	HS, DJ	
37	RI	01	566.7	HS, DJ	
40	LP	01	572.7	HS	
41	RI	01	592.6	HS, DJ	
42	RI	02	592.6	HS	
46	LP	00	600.7	HS, DJ	
48	RI	01	655.9	HS	
49	CB	11	655.9		ACW=1.5 TEMP=5.5
50	PP	02	655.9	HS	
53	RI	02	655.9	HS, DJ	
55	RP	01	712.5	HS, DJ TJ/	
56	RB	11	712.5		ACW=2.5 TEMP=6.0
57	RI	00	738.2	HS	ROOT WADS
58	LP	00	753.2	HS	
59	RB	01	778.2	HS, DJ	
64	LP	01	812	HS, /TJ	
65	RB	00	822		ACW=2.8 TEMP=8.0
68	RI	00	908.2	HS, DJ	

Comment Summary

Restoration Monitoring Sites 2007

MONITORING AREA: 1-NC SITE ID: 337 ELLIOTT CREEK POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
70	RB	01	943.3	TJ/	
71	CB	11	943.3		ACW=2.1 TEMP=7.0
72	RB	02	943.3	HS	
75	RB	01	1005	HS	
80	LP	01	1026.9	DJ	
81	RI	01	1047.8	HS	
88	LP	04	1047.8	HS	
89	SL	04	1047.8	DJ	
91	RI	05	1047.8	HS, /SS	
92	LP	05	1047.8	HS	
93	RI	05	1047.8	HS	
94	RB	05	1047.8	TJ/ HS DJ	
95	RB	11	1047.8	DJ	ACW=1.4 TEMP=4.0
104	RB	08	1047.8	HS	
105	RB	00	1101.4	HS, BV	
108	LP	00	1143.1	WL	100mm SALMONIDS
110	RI	00	1226.4	TJ/TJ	
111	CB	11	1226.4		ACW=0.8, TEMP=6.5
112	CB	00	1232.4		ACW=1.3, TEMP=5.0



Name: WOODS POINT
 Date: 4/25/2007
 Scale: 1 inch equals 2000 feet

Location: 10 0469827 E 5050713 N
 Caption: ELLIOTT CREEK RESTORATION SITE - DEVILS LAKE FORK
 WILSON BASIN